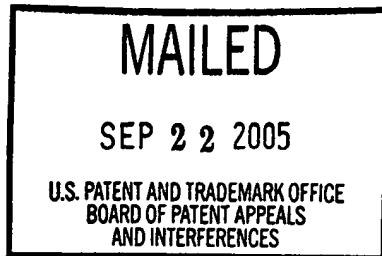


The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MICHAEL S. WILLIAMS
and
R. RICHARD SARGENT



Appeal No. 2005-1302
Application No. 09/255,222

ON BRIEF

Before WALTZ, KRATZ, and TIMM, *Administrative Patent Judges*.
TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal involves claims 1-6 and 36 which are all the claims pending in the application. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

INTRODUCTION

The claims are directed to the use of urea sulfate in various pulping and paper making process streams. Claims 1 and 36 are illustrative of the subject matter on appeal:

1. A method of decreasing the amount of aluminum sulfate hydrate required by a pulping or papermaking process, comprising adding to a process stream or solution of said pulping or papermaking process an effective amount of urea sulfate.

36. A method of adjusting the pH of a process stream or solution of a pulping or papermaking process comprising adding thereto a pH adjusting effective amount of urea sulfate, wherein the process stream or solution is selected from a prehydrolysis solution, a pulping solution, a pulping effluent stream, a recycled pulping process stream, a washing solution, a washing effluent, a sizing solution, a dyeing solution, or a papermaking effluent stream.

The Examiner rejects the claims under 35 U.S.C. § 103(a). As evidence of obviousness, the Examiner relies upon the following prior art references:

Lindström et al. (Lindström)	4,911,790	Mar. 27, 1990
Sargent et al. (Sargent)	5,234,466	Aug. 10, 1993

Specifically, the Examiner maintains the following rejections:

1. Claim 36 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sargent;
and
2. Claims 1-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lindström
in view of Sargent.

We affirm with respect to the rejection of claim 36, but reverse with respect to the rejection of claims 1-6. Our reasons follow.

OPINION

As stated above, claim 36 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sargent. Appellants assert that because claim 36 is entitled to the filing date of the application which matured into the Sargent patent, Sargent is not available as prior art against claim 36 (Brief, p. 5).

For a claim in a later-filed application to be entitled to the filing date of an earlier application under 35 U.S.C. § 120, the earlier application must comply with the written description requirement of 35 U.S.C. § 112, ¶1. *See* 35 U.S.C. § 120 (1998).¹ “This requires the disclosure in the earlier application to reasonably convey to one of ordinary skill in the art that the inventors possessed the later-claimed subject matter when they filed the earlier application. *In re Curtis*, 354 F.3d 1347, 1351, 69 USPQ2d 1274, 1276 (Fed. Cir. 2004). “Entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed.” *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997). “A prior application itself must describe an invention, and

¹In fact, each application in the chain leading back to the earlier application must comply with the written description requirement of 35 U.S.C. § 112, ¶ 1 in order to gain the benefit of the filing date of the earlier application. *See* 35 U.S.C. § 120 (1998); *see also Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997). We note there are a number of intervening continuation-in-part and divisional applications between the current application and the application which matured into the Sargent patent. Whether any of the intervening applications break the chain with regard to filing date entitlement is an open question, but a question we need not address here.

do so in sufficient detail that one skilled in the art can clearly conclude that the inventor invented the claimed invention as of the filing date sought.” *Id.*

We agree with the Examiner that the disclosure of Sargent is insufficient to support claim 36. Sargent is mostly directed to the lowering of the pH of textile processing solutions. There is a broader more generalized disclosure of other uses which is as follows:

Urea sulfate, as well as the equivalent strong acid/weak base salts disclosed herein, can be used in any process that sulfamic acid or like acids have traditionally been used in, including but not limited to sulfation, metal cleaning, scale removal, manufacture of dyes and pigments for the removal of excessive nitrite from diazotization reactions, in paper manufacturing by reducing pulp degradation in the bleaching stages of electroplating, and as a catalyst in urea-formaldehyde resin manufacturing. Urea sulfate can also replace traditional acids for solvation, in aqueous cleaning solutions, and in processing solutions not related to textile processing. Materials that can be cleaned include metals, jewelry, printed circuit boards, wood, masonry, mortar, concrete, painted surfaces, plastics, polymeric substances, and the like.

(col. 3, ll. 4-19). Clearly there is no mention of pH adjustment of any of the streams and solutions of the pulping or papermaking processes enumerated in claim 36. Instead, one is left to select from the myriads of possibilities encompassed by the broad disclosure, with no guidance as to what processes should be selected rather than any of the many others which could also be selected. In the absence of guidance within the earlier application which matured into Sargent indicating that the claimed papermaking streams and solutions were of special interest, simply describing a large genus of process possibilities is not sufficient to reasonably convey to the artisan that the inventor had possession of adjusting the pH of the specifically claimed papermaking streams and solutions at that time of the later claimed subject matter of claim 36.

See Fujikawa v. Wattanasin, 93 F.3d 1559, 1571, 39 USPQ2d 1895, 1904-05 (Fed. Cir. 1996).

Sargent is available as prior art.

We next turn to the question of obviousness. In that regard Appellants argue that “[t]he Examiner has not provided any reference teaching (nor has he provided an affidavit memorializing the Examiner’s personal knowledge under 37 C.F.R. § 1.104(d)) that motivates one of ordinary skill in the art to adapt the disclosure of [Sargent] to the process streams recited in claim 36.” (Brief, p. 5). We disagree. The evidence is sufficient to support the Examiner’s finding of a motivation. Sargent articulates specific advantages for using urea sulfate to adjust the pH of textile processing solutions: Urea sulfate is less corrosive and more environmentally friendly than traditional pH adjusting agents (col. 2, ll. 32-36 and ll. 52-63). We note that Sargent discloses using urea sulfate to replace traditional acids in a range of uses other than textile processing solutions and specifically exemplifies use in a bleaching operation of a papermaking process (col. 3, ll. 4-15). That traditional acids were routinely added to other papermaking streams and solutions, such as those enumerated in claim 36, can hardly be questioned: Appellants’ own specification acknowledges that such uses were well known (specification, pp. 2-9, particularly, p. 8, ll. 1-4).² The evidence as a whole supports the

²It is axiomatic that admitted prior art in an applicant’s specification may be used in determining the patentability of a claimed invention (*In re Nomiya*, 509 F.2d 566, 570-71, 184 USPQ 607, 611- 12 (CCPA 1975); and that consideration of the prior art cited by the examiner may include consideration of the admitted prior art found in an applicant’s specification (*In re Davis*, 305 F.2d 501, 503, 134 USPQ 256, 258 (CCPA 1962); *cf.*, *In re Hedges*, 783 F.2d 1038, 1039-40, 228 USPQ 685, 686 (Fed. Cir. 1986)).

conclusion of the Examiner that one of ordinary skill in the art would have been motivated to replace the traditional acids used to adjust pH in the conventional pulp and papermaking streams of claim 36 with urea sulfate in order to obtain the advantages disclosed in Sargent. “A prior art reference must be ‘considered together with the knowledge of one of ordinary skill in the pertinent art.’” *In re Paulsen*, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1675 (Fed. Cir. 1994)(citing *In re Samour*, 571 F.2d 559, 562, 197 USPQ 1, 3-4 (CCPA 1978)).

Appellants seem to believe that there is some inconsistency between a finding of lack of written description under 35 U.S.C. § 112, ¶ 1 and a conclusion of obviousness under 35 U.S.C. § 103(a) (Brief, pp. 5-6). That is not the case. As discussed in *Lockwood v. American Airlines, Inc.*:

Entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed. It extends only to that which is disclosed. While the meaning of terms, phrases, or diagrams in a disclosure is to be explained or interpreted from the vantage point of one skilled in the art, all the limitations must appear in the specification. The question is not whether a claimed invention is an obvious variant of that which is disclosed in the specification. Rather, a prior application itself must describe an invention, and do so in sufficient detail that one skilled in the art can clearly conclude that the inventor invented the claimed invention as of the filing date sought. *See Martin v. Mayer*, 823 F.2d 500, 504, 3 USPQ2d 1333, 1337 (Fed.Cir.1987) (stating that it is “not a question of whether one skilled in the art might be able to construct the patentee's device from the teachings of the disclosure.... Rather, it is a question whether the application necessarily discloses that particular device.”) (quoting *Jepson v. Coleman*, 50 C.C.P.A. 1051, 314 F.2d 533, 536, 136 USPQ 647, 649-50 (1963)).

107 F.3d 1565 at 1571-72, 41 USPQ2d at 1966. “That a person skilled in the art might realize from reading the disclosure that such a step is *possible* is not a sufficient indication to that person

that the step is part of appellants' invention." *In re Barker*, 559 F.2d 588, 593, 194 USPQ 470, 474 (CCPA 1977), *cert. denied*, 434 U.S. 1064 (1978)(quoting *In re Winkhaus*, 527 F.2d 637, 640, 188 USPQ 129, 131 (CCPA 1975)). On the other hand, for a determination of obviousness, it is appropriate to consider what the prior art would have suggested to one of ordinary skill in the art. Here, the suggestion of replacing traditional acids in a wide range of known processes to solve corrosion and pollution problems conveyed by Sargent combined with the fact that the processes of the claim were known to require pH adjustment provides a level of evidence sufficient to establish a prima facie case of obviousness.

We note that Appellants base no arguments upon objective evidence of non-obviousness such as unexpected results. We conclude that the Examiner has established a prima facie case of obviousness with respect to the subject matter of claim 36 which has not been sufficiently rebutted by Appellants.

We next turn to the rejection of claim 1-6 under 35 U.S.C. § 103(a) as being unpatentable over Lindstrom in view of Sargent. Claim 1, the only independent claim rejected, is directed to a pulp or papermaking process which requires the addition of aluminum sulfate hydrate. Claim 1 requires the addition of an amount urea sulfate effective to decrease the amount of aluminum sulfate hydrate required in the process. Appellants do not dispute that it is known in the art to regulate the pH of papermaking process solutions with aluminum sulfate (Brief, p. 7). But they point out that pH adjustment is not the only effect of adding aluminum sulfate in the process of Lindström. The Examiner does not dispute this fact but, instead acknowledges that aluminum

sulfate is added in the process of Lindstrom to improve filler retention as well as regulate pH (Answer, p. 5). We agree with Appellants that, in view of the fact that aluminum sulfate has multiple effects in the process of Lindström, it is not a straightforward obvious matter to substitute the aluminum sulfate with urea sulfate. The Examiner not provided any evidence that those of ordinary skill in the art would understand how to decrease aluminum sulfate levels without undesirably impacting the fines retention and other properties for which aluminum sulfate is added.

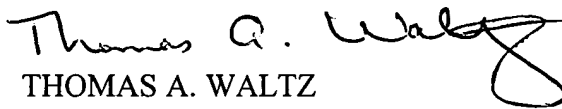
We conclude that the Examiner has failed to establish a prima facie case of obviousness with respect to the subject matter of claims 1-6.

CONCLUSION


To summarize, the decision of the Examiner to reject claim 36 under 35 U.S.C. § 103(a) is affirmed, but the decision of the Examiner to reject claims 1-6 under 35 U.S.C. § 103(a) is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART


THOMAS A. WALTZ
Administrative Patent Judge


PETER F. KRATZ
Administrative Patent Judge


CATHERINE TIMM
Administrative Patent Judge

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